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10/665,294

09/22/2003

I-Ming Lin

TOP 323

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03/23/2005

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EXAMINER

TON, MY TRANG

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/665,294

Applicant(s)

LIN, I-MING

Examiner

My-Trang N. Ton

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-9,11,15 and 16 is/are rejected.
- 7) ☒ Claim(s) 3-5,10 and 12-14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


MY-TRANG N. TON
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

In response to Applicant's amendment filed on January 4, 2005, the rejection made in the last Office action on the Nguyen (U. S Patent No. 6,014,042) and Bush et al (U.S Patent No. 3,991,322) references is withdrawn. A new Office action has been made as follows:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 6-9, 11 and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Beg et al (U. S Patent No. 5,264,802).

Beg et al disclose in Fig. 3 a circuit for monitoring phase error modulation including:

Regarding claim 1:

a detection circuit for (14 and XNOR provides 20) receiving as input first and second clocks (22 and 24, see col. 4, lines 15-20) and generating as output a compare signal (20); and

a sampling circuit (24), according to the compare signal (20), for asserting an output signal (SFE*) indicative of skew existing between the first and second clocks (22, 24), wherein the output signal (SFE*) is set to indicate an amount of skew between the first and second clocks (the skew between two clocks 22 and 24).

The first clock (22) is inherent transmitted with a differential signaling scheme as recited in claim 2.

Regarding claim 6: because the claimed structure is fully met by Beg, the recited function “the width of the compare signal generated by the detection circuit is substantially proportional to the amount of the skew between the first and second clocks” will necessarily be inherent in Beg, as held by the court in *In re Best*, 195 USPQ 430.

Claim 7 is similarly rejected as claim 6. The recited function “the sampling circuit ... between the first and second clocks” will necessarily be inherent in Beg, as held by the court in *In re Best*, 195 USPQ 430.

Regarding claim 8: the limitation “a phase locked loop for providing the sampling circuit with a reference clock ...” is seen to define intended use. The clock “CLK” or “CLK*” in block 22 of Beg is capable of receiving from a phase locked loop. *In re Tuominen*, 213 USPQ 89 (CCPA 1982) & *In re Pearson*, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974). Also, see col. 5, lines 64 – col. 6, line 5.

Claim 9 is similarly rejected as claims 1 and 6:

a detection circuit (14 and XNOR provides 20) for receiving as input first and second clocks (22 and 24, see col. 4, lines 15-20) and generating as output a compare signal (20); and

a sampling circuit (24), according to the compare signal (20), for asserting an output signal (SFE*) indicative of skew existing between the first and second clocks (22, 24),

wherein the width of the compare signal is substantially proportional to an amount of the skew between the first and second clocks (inherent seen in Beg) and the output signal is set to indicate an amount of skew between the first and second clocks (the skew between two clocks 22 and 24).

Moreover, regarding the limitation "a first IC chip" and "a second IC chip" are seen to define intended use. The clocks Fex at 22 and Fph at 24 are capable of receiving from two IC chips. In re Tuominen, 213 USPQ 89 (CCPA 1982) & In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974).

Claim 11 is similarly rejected as claim 2.

Claims 15 and 16 are similarly rejected as claims 7-8.

Allowable Subject Matter

Claims 3-5, 10, 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the prior art disclosed or suggested to show the particular structure and/or the particular operation recited in these claims namely: "a first differential-to-single-ended converter ..." (claims 2 and 12), "an enable signal external to the first IC chip" and "and output buffer ... under control of the enable signal" as recited in claim 10.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Trang N. Ton whose telephone number is 571-272-1754. The examiner can normally be reached on 7:00 a.m - 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



My-Trang N. Ton
Primary Examiner
Art Unit 2816

March 17, 2005